
ECHO AUTISM
COMMUNITIES
Mental Health

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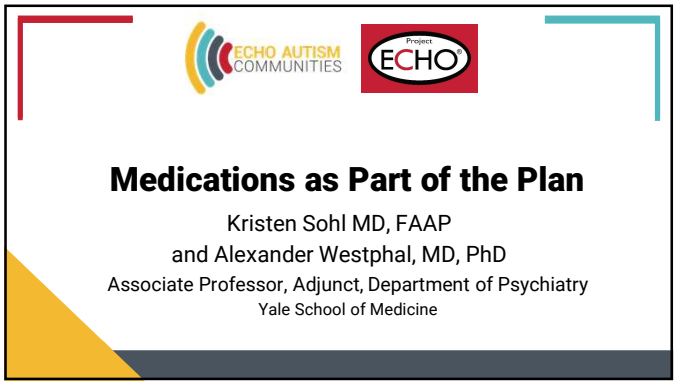
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Project ECHO
Medications as Part of the Plan
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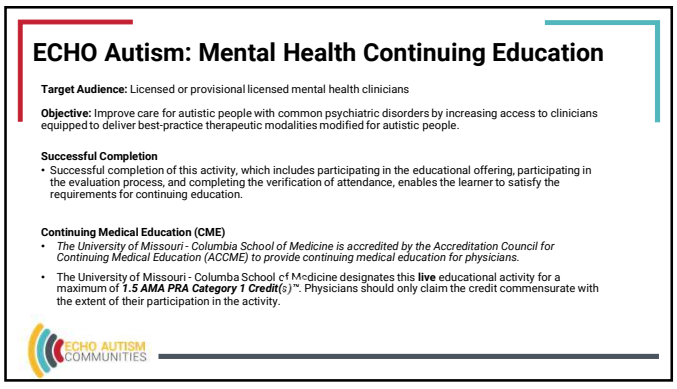
ECHO Autism: Mental Health Continuing Education
Target Audience: Licensed or provisional licensed mental health clinicians
Objective: Improve care for autistic people with common psychiatric disorders by increasing access to clinicians equipped to deliver best-practice therapeutic modalities modified for autistic people.
Successful Completion
• Successful completion of this activity, which includes participating in the educational offering, participating in the evaluation process, and completing the verification of attendance, enables the learner to satisfy the requirements for continuing education.
Continuing Medical Education (CME)
• The University of Missouri - Columbia School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.
• The University of Missouri - Columba School of Medicine designates this live educational activity for a maximum of 1.5 AMA PRA Category 1 Credit(s)™. Physicians should only claim the credit commensurate with the extent of their participation in the activity.
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ECHO Autism: Mental Health Speaker Disclosure

Relevant Financial Disclosures

Current ACCME (Accreditation Council for Continuing Medical Education) rules state that participants in CE activities should be made aware of any relevant affiliation or financial interest in the previous 24 months that may affect the planning of an educational activity or a speaker's presentation(s).

Each planning committee member and speaker has been requested to complete a financial relationship reporting form for the ***ECHO Autism Mental Health Series – Cohort 4***.

Speaker Disclosures:

Kristin Sohl, MD,FAAP receives support:

- **Cognoa Behavior Health – research support**
- **Quadrant Biosciences – medical science collaborator**

All relevant financial relationships for the presenter have been mitigated.

No other speaker or planning committee member has relevant financial interest

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Goal

- Review the overall approach to the use of psychopharmacology in autistic patients for
  - The treatment of co-occurring psychiatric disorders
  - The symptomatic management of challenging behaviors

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Patients with ASD receive a lot of psychotropic medications

- Review of 47 studies of more than 300,000 ASD patients -
  - Prescriptions are for non-core symptoms and co-occurring psychiatric conditions
  - Median prevalence of medication 41.9% in children; 61.5% in adults
  - Polypharmacy 5.4%-54% (median 23%)
  - Use of medication overall, polypharmacy, dopamine blocking (antipsychotics) and serotonergic (antidepressant/anxiety) medications were more prevalent in
    - males, older patients, and those with co-occurring psychiatric conditions
  - Patients placed on psychotropics tend to stay on them
  - Younger patients get more stimulants
  - Males get more dopamine blockers/stimulants; females more serotonergic
    - (Jobski et al (2016))

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Psychotropic medication regimes may be quite complex

For example -

- A study of severely affected patients showed that 70/1100 patients had more than one antipsychotic prescribed
  - Males, intellectually disabled, mean age 15.1, targeted symptoms agitation/irritability, physical aggression and self injury
  - Most stayed on two dopamine blockers for more than a year, and improved without significant adverse effects
- A study of inpatients at specialized psychiatric units showed that
  - Over half the patients had more than one psychotropic prescribed
  - Patients were on the same number of medications at discharge BUT a significant minority discontinued dopamine blockers/GI medications/sleep aids soon after

Wink et al 2017, 2018

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Safety monitoring is critical

- Younger patients/nonverbal patients may not be able to communicate well about side effects
- ASD patients are on medications for a long time leading to longer term risk for certain medications
- Commonly used medications in ASD are stimulants and dopamine blockers (antipsychotics)
  - ➢ 3 antipsychotics and 3 stimulants are among the 20 drugs most likely to be reported to the FDA for serious adverse events
- Polypharmacy increases the likelihood of adverse drug interactions and adverse events

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Before, during and throughout, thorough assessment is important

- Assessment must always include -
  - Careful and thorough biopsychosocial history
    - Presenting complaint, with details
    - Is there a co-occurring psychiatric disorder?
    - What are the problem behaviors? How frequent? How long? How intense?
    - Current and previous interventions
  - Detailed mental status examination
  - Medical history, current prescriptions, vital signs, investigations where indicated
  - Collateral information
  - Refer for further evaluations if needed

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Be clear about the treatment goal

- Are you treating a **co-occurring psychiatric disorder**?
- If so, what?
  - ADHD
  - Anxiety
  - Depression
  - Bipolar disorder
  - Schizophrenia
  - Other
- If so, then utilize scientific understanding of brain mechanisms, evidence-based decision making and approved treatment guidelines for that condition

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Be clear about the treatment goal

Or are you treating **symptomatically**?

- Clearly identify treatment goal
  - Impulsivity? Anxiety? Agitation? Aggression? Self injury? Etc.
- Be aware that the evidence to support the use of psychotropic medications for the symptomatic management of aggression and self injury is not strong

Identify measures and follow them across appointments

- Episodes - Frequency? Intensity? Duration?
- Use appropriate rating scales where available

Review over time; be aware that day to day variation is considerable

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Informed consent and assent

- No such thing as a 'safe' medication
- Risk benefit analysis is critically important
- The more dangerous the behavior, the greater may be the risk tolerance for an intervention
  - Clozapine used off label may be helpful for self injury/aggression
    - BUT clozapine has high rates of dangerous side effects, and significant monitoring requirements
    - Should only utilized in high-risk situations
  - Methylphenidate has considerable data to support both safety and efficacy in ADHD (including ADHD and ASD
    - Dangerous side effects are rare, there are no/few monitoring requirements
    - May be utilized in much lower risk situations

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Be realistic with patients, parents and colleagues

- Psychotropic medication management is never the whole plan; it's part of the plan
- Psychotropic medication management is never 'just' medication management
  - medication management ALWAYS includes psychoeducation and supportive therapy and OFTEN includes behavioral advice and elements of other forms of therapy
- Psychotropic medication can be life changing BUT
  - Not everything responds to medication
  - Not everyone responds to medication

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Follow up

- Plans for follow up should be agreed at the outset of treatment and regularly reviewed
- Frequent appointments mean that patients become familiar to the physician or other clinician, so the interpretation of changes in behavior, assessment of family resources, response to crisis, etc. are more manageable
- Engagement in treatment is supportive for patient and family, even if no 'formal' psychotherapeutic intervention occurs
  - Do not under-estimate the importance of the ongoing patient-family-physician relationship

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Follow up appointments should include:

Interim history

- Biopsychosocial review
  - New/worsening biological, psychological or social issues?
- Targeted symptom review if a co-occurring psychiatric diagnosis exists OR if symptom management is being undertaken
- Review of the problem behaviors
  - What are they? How frequent? How long? How intense?
  - Monitoring using appropriate rating scales
- What other interventions are in place and are they appropriate?

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Decisions about prescribing may have long term impact

FOR EXAMPLE:

- Dopamine blocker at aged five may mean a dopamine blocker until age twenty-five
  - Tardive dyskinesia occurs in up to 30% of patients on dopamine blockers
  - All antipsychotics block dopamine receptors – all may be associated with TD
  - Second generation antipsychotics (including aripiprazole and risperidone) also impact other receptors in the brain and may be particularly associated with weight gain, dyslipidemias, and metabolic syndrome
- Consent/assent and risk/benefit analysis must be ongoing

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Guidelines on medication utilization in ASD

- Start low/go slow
- Be aware that patients with ASD have higher rates of side effects
- Response may be unpredictable
- Limitations in patient communication make monitoring more difficult
- Change ONE thing at a time
- Use ONE medication if possible
- Reduce dosing regularly to establish ongoing benefit
- Collaborate with others treating the patient

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Questions?

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Resources:

- https://www.autismspeaks.org/tool-kit/atnair-p-medication-decision-aid
- https://www.aacap.org/App_Themes/AACAP/Docs/resource_centers/autism/Autism_Spectrum_Disorder_Parents_Medication_Guide.pdf

- Howes et al. 2018 Autism spectrum disorder: Consensus guidelines on assessment, treatment and research from the British Association for Psychopharmacology J Psychopharmacol. Jan;32(1):3-29
- Goel et al 2018 An update on pharmacotherapy of autism spectrum disorder in children and adolescents Int Rev Psychiatry 30(1):78-95

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